2015 Codes Adoption & Amendments Summary, Boulder County:

General. The International Code Council ("ICC") publishes new editions of their family of nationally recognized model codes every 3 years, with 2015 being the latest edition. Boulder County adopts or may adopt the following codes:

- International Building Code ("IBC")
- International Residential Code ("IRC")
- International Energy Conservation Code ("IECC")
- International Existing Buildings Code ("IEBC") (New-existing buildings Ch. 34 in IBC has been deleted)
- International Fuel Gas Code ("IFGC")
- International Green Construction Code (IGCC) (for buildings or groups of buildings > 25,000 sq. ft.)
- International Mechanical Code ("IMC")
- International Performance Code (for evaluating alternate methods and materials only)
- International Plumbing Code ("IPC")
- International Swimming Pool and Spa Code ("ISPSC") (New-may adopt and amend to include existing BuildSmart pool and spa provisions. The ISPSC also contains pool and spa barrier requirements.)
- The National Electrical Code ("NEC") is adopted by the State Electrical Board for application by Colorado's local jurisdictions. The current edition, adopted by the state in July of 2014, is the 2014 NEC.

Administrative. Boulder County has, since at least 1983, combined the Chapter 1 administrative provisions of all the adopted model codes into a single Chapter 1, which is known, along with the other amendments, as the "Boulder County Building Code" ("BCBC"). As part of the adoption process, the BCBC administrative provisions are compared with the current published requirements. Wherever possible, local amendments are deleted in favor of the published model code language. As part of the 2015 process, we will consider an option to substantially eliminate our Chapter 1 and adopt the 1st chapters of all the model codes, adding amendments only where necessary to comply with Colorado statutes or other state or local needs.

2015 Changes. The changes to the 2015 editions from the currently adopted 2012 editions will be evaluated. Changes that conflict with Colorado statutes for counties, local conditions or practices or other existing programs are to be deleted or amended, although the general goal is to attempt to minimize local amendments. Generally speaking, there are no major changes, especially when compared to changes like the 2009 residential fire sprinkler requirement or the major jumps in energy efficiency requirements that occurred in the 2009 and 2012 Energy Codes.

Residential Fire Sprinklers. The 2009, 2012 and now the 2015 edition of the published IRC include minimum requirements for installing automatic fire sprinkler systems in all new one- and two-family dwellings and townhouses. The county included these provisions in its adoption of the 2009 IRC, but delayed the effective date until January 1, 2013 in accordance with the recommendations of the Colorado Joint Ad-Hoc Residential Sprinkler Committee.

Under Sections R313 and P2904 of the IRC, a fire sprinkler that is said to be "95%" of an NFPA 13D system may also be installed. "P2904 multipurpose" systems, which use the same water supply as the rest of the dwelling, may be designed and installed by state-licensed plumbers or by homeowner/builders.

Six (6) of the county's 20+ fire protection districts have already adopted the 2012 edition of the International Fire Code (IFC), and others have begun considering adoption of the 2015 IFC, which include these same fire sprinkler requirements. Boulder County has required fire sprinkler systems for new homes over 3,600 sq. ft. and additions plus existing homes totaling 4,800 sq. ft. or greater for over 20 years now, beginning in 1995. In addition to the requirements for all new dwellings, the fire sprinkler amendments include require-

ments for additions and major renovations to large existing dwellings, with an exception for minor additions not exceeding 200 sq. ft.

There may be an amendment proposal to clarify the provisions for sprinklering existing homes with additions or remodels/renovations that are 4,800 sq. ft. or larger in size where there are other buildings within 50 feet of the dwelling.

Ignition-Resistant Construction (IBC 722, IRC R325 amendments). The county's amendments requiring ignition-resistant construction and defensible space around new homes and additions to existing homes in areas prone to wildland fire have been in place and evolving since the aftermath of the Black Tiger Fire in 1989. More recently, the Fourmile Canyon Fire, the ensuing Udall Report, the latest Colorado fires and other sources from around the country have provided additional information regarding the latest fire science and the "best bang for the buck" in terms of reducing the risk of homes being destroyed in wildfires. Another option being considered is the adoption, in whole or in part, of the International Wildland-Urban Interface Code (IWUIC).

Our goal is to apply the latest fire science in helping to reduce the risk that county homes will be destroyed during future wildfires. For the 2015 codes, we are also attempting to simplify the requirements, including the possibility of reducing the number of hazard ratings from the existing three (Moderate, High and Extreme) to one. We are also looking at the potential for the county's highly successful "Wildfire Partners" program to be used as a compliance option for additions and remodels/renovations to existing homes.

Energy Code (IECC). Our current adoption of the 2012 International Energy Conservation Code (IECC), includes amendments for "above code" requirements, similar to the residential "BuildSmart" program, for the prescriptive path and performance paths, as well as the addition of provisions for retrofit upgrades to existing buildings with large additions/renovations, system commissioning, water conservation, deconstruction, construction jobsite waste reduction and recycling and trash storage and recycling areas. The Boulder County Sustainability Plan includes goals that our codes contain provisions that all new commercial buildings be "net zero" by January 1, 2028, so there will be an effort to increase the energy efficiency requirements for new commercial buildings.

The energy provisions in the IECC and the IRC are no longer developed under separate processes. The residential provisions of the IECC are simply reprinted, with a certain amount of necessary editing, in Chapter 11 of the IRC, and this will be the basis for our 2015 BuildSmart provisions.

BuildSmart (amended Ch. 11, IRC). BuildSmart is the county's residential green building program, which has been in place, and evolving, since it first became effective on May 1, 2008. BuildSmart has been an "above code" program, with provisions for HERS ratings, job site recycling, landfill diversion, blower door and duct blaster testing, renewable offsets for exterior use of fossil fuels, etc.

The 2009 and 2012 Energy Codes greatly "ramped up" the energy efficiency requirements of the published model codes, to the point where the 2012 IECC exceeded the 2009 version of BuildSmart in at least a couple of categories. In the 2015 codes, other model code requirements have "caught up" to BuildSmart, including mandatory blower door testing, and, for the first time, allowing a HERS rating as an option for compliance.

Boulder County policy is that we'd still like to be "above code" and "cutting edge" in terms of our green building programs. To that end, the Boulder County Sustainability Plan includes a goal that our codes contain provisions that all new homes be "net zero" by January 1, 2022. The 2015 version is planned to include another incremental step toward that goal.

The two main focuses to date for the 2015 BuildSmart are to: 1) start with Chapter 11 of the IRC as published and insert the Boulder County amendments into this format so that it is easier to understand and use, and 2) to offer simpler and more flexible compliance paths for additions and remodels/renovations to existing homes.

International Green Construction Code (IgCC). The current BCBC includes the adoption of the 2012 IgCC, but the scope has been modified to apply only to commercial buildings greater than 25,000 sq. ft. The 2015 edition is to be evaluated for adoption, including factors such as the potential for application in the unincorporated county, avoiding conflicts or redundancy with other model codes or amendments, the enforceability of "post occupancy" requirements by a statutory county, the need for coordination with other county regulations, standards and staff, etc. A typical IGCC adoption will require energy usage or a carbon footprint or similar measurement of 10% less than that permitted by the 2015 Energy Code (IECC). Staff will also explore the adoption of a simpler "IgCC Light" version that was proposed as part of the national IgCC code development process.

ICC Performance Code. Part of the program for the 2015 adoptions is to continue adopting this code as a guide for evaluating appeals for the use of modifications and alternate methods and materials. The performance code facilitates the use of tools like fire, smoke and egress modeling to evaluate alternate designs for equivalency to the prescriptive codes. Over the last few years, building owners and design professionals in the county have used fire protection engineers to evaluate situations and demonstrate code equivalency on a number of occasions, and the Performance Code is an excellent tool for this.

International Existing Building Code (IEBC). The 2015 IBC no longer contains a Chapter 34 to deal with existing buildings, so we may need to adopt the IEBC. It is also a good tool for facilitating the adaptive reuse of older and/or historic buildings.

International Swimming Pool and Spa Code (ISPSC). This code is relatively new, in its second edition. Staff will evaluate it for adoption, including potentially inserting the existing BuildSmart requirements offsetting fossil fuel energy use with renewable energy sources.

Agricultural Policies. The county's agricultural policies and land use regulations have been updated to encourage and allow a wide range of agricultural uses, including traditional farming, farm stands, agricultural education facilities, "farm to table" dinners and other events associated with agricultural activities. Just one of the issues associated with this is whether to review proposed agricultural buildings as more or less accessory to residential uses under the IRC or to require a more commercial level of review under the IBC. We may attempt to create a "dividing line" between the IRC and the IBC by using some combination of criteria such as size, occupant load, private or public access, etc.

Cannabis ("Marijuana") Facilities. The county now has both medical and recreational marijuana facilities, from retail centers to "grows" to other processing, like infusion or "foods." The staff works with the county's local licensing authority to inspect existing facilities, respond to referrals, process building permits and perform plan reviews and inspections. As part of this process, we will evaluate the need for any amendments to better deal with these facilities, such as looking at the extremely high rate of energy use for "grow" facilities.

Miscellaneous. General cleanup and fixes, deletion of any existing local amendments that now appear in the latest published codes, etc.